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**Joint Military Operations Term Paper:**

**Logistics Operations  
in a Region with No Previous U.S. Military Presence**

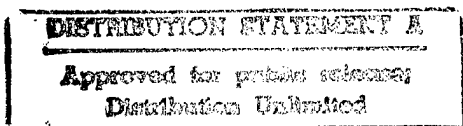
**by**

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**A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Strategy and Policy.**

**The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.**

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15. Abstract: THE U.S. MILITARY IS INCREASINGLY INVOLVED IN SUPPORTING MILITARY OPERATIONS IN REGIONS OF THE WORLD WHERE IT HAS HAD NO PRESENCE. THESE ISOLATED AREAS OFTEN HAVE POORLY DEVELOPED INFRASTRUCTURES. THE HIGH LEVELS OF REQUIRED LOGISTICAL SUPPORT PLACE A HEAVY BURDEN ON THE JOINT FORCE COMMANDER RESPONSIBLE FOR OPERATIONS IN A REGION. THE BASIC FRAMEWORK FOR ESTABLISHING LOGISTICAL NETWORKS IN THESE LOCATIONS IS NO DIFFERENT FROM SETTING UP SUPPLY LINES IN MORE ESTABLISHED AREAS. YET THE OPERATIONAL DETAILS A JOINT FORCE COMMANDER WILL FACE CAN BE MORE INTRICATE AND CHALLENGING. A REGION'S ISOLATION MAY REQUIRE LENGTHY TRANSIT TIMES. BILATERAL AND MULTILATERAL STATUS OF FORCES AGREEMENTS GOVERNING THE TRANSIT OF LOGISTICAL SUPPORT MAY NOT BE IN PLACE. FOREIGN HOST GOVERNMENT OFFICIALS AND COALITION PARTNERS MAY NOT HAVE EXPERIENCE AT DEALING WITH LOGISTICAL SUPPORT OF MILITARY OPERATIONS IN THE REGION. MILITARY CONTRACTORS MAY ALSO BE INEXPERIENCED. INTERNAL DEPARTMENT OF DEFENSE REGULATIONS MAY REQUIRE FINE TUNING TO SUPPORT THE LOGISTICAL NEEDS OF A MISSION. ANALYZING THESE ISSUES WITHIN THE FRAMEWORK OF AN ISOLATED, UNDERDEVELOPED REGION PROVIDES INSIGHT INTO LOGISTICAL SOLUTIONS. COORDINATION AMONG DEPARTMENT OF DEFENSE, OTHER U.S. GOVERNMENT AGENCIES, THE PRIVATE SECTOR AND ALLIED FOREIGN GOVERNMENTS CAN PROVIDE MORE EFFICIENT AND COST EFFECTIVE OPERATIONAL LOGISTICS. IN THE END ANALYSIS, WELL ORGANIZED LOGISTICS ALLOWS THE JOINT FORCE COMMANDER TO FOCUS ON HIS PRIMARY TASK—ACCOMPLISHING THE GOALS OF THE MISSION.			
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## EXECUTIVE SUMMARY

The U.S. military is increasingly involved in supporting military operations in regions of the world where it has had no presence. These isolated areas often have poorly developed infrastructures. The high levels of required logistical support place a heavy burden on the Joint Force Commander responsible for operations in the region.

The framework for establishing logistics networks in these locations is no different from setting up supply lines in more established areas. Yet the operational details a Joint Force Commander will face can be much more intricate and challenging. The region's isolation may require long supply lines with lengthy transit times. Bilateral and multilateral status of forces agreements governing the transit of logistical support may not be in place. Foreign host government officials and coalition partners may not have experience at dealing with logistical support of military operations in the region. Military contractors may also be inexperienced. Internal Department of Defense regulations may require fine tuning to support the logistical needs of such a mission.

Analyzing these issues within the framework of an isolated, underdeveloped region provides insight into logistical solutions. Solid coordination among the Department of Defense, other U.S. government agencies, the private sector and allied foreign governments can provide more efficient and cost effective operational logistics. Well organized logistics allows the Joint Force Commander to focus on his primary task—accomplishing the goals of the mission.

## **OVERVIEW**

Since the end of World War II, the U.S. military has developed and refined a logistics network that was primarily designed to support military operations countering a Soviet threat. In this current post-Cold War era, logistics is being reengineered to reflect the changing landscape. Over the last half century, the potential for conflict in Eastern Europe was very real. Now the possibility of military operations in other regions such as the Middle East appears more likely. Chances are high that the U.S. military will be called increasingly to conduct military operations other than war (MOOTW) in geographic locations where American forces have not had a traditional presence.

Wherever a military operation transpires, the framework of logistical support highlighted in Joint Publication 4-0 remains the same: Logistics will be required to support an operation's material efforts and arrange for personnel movement, evacuation and hospitalization. Logistics will also be called on to organize the services and facilities essential to an operation.

Yet in a region where the U.S. military has had no traditional presence, it will be much more difficult for joint forces to provide logistical support. First, the military's inexperience in the region means that troops will need to calculate the particular geographic and culture issues that will affect logistical operations. Second, the likelihood is high that a region with no former U.S. military presence will require an abnormally high level of logistical support because it may be geographically isolated with a poorly developed infrastructure.

The purpose of this paper is to highlight potential logistical problems affecting the Joint Force Commander (JFC) when logistics are required to support operations in areas lacking a logistics infrastructure. In these situations, the need for logistical support is particularly heavy and risks imposing requirements that draw the JFC's focus away from his primary mission. By considering these problems and exploring possible solutions outlined in this paper, a JFC's staff can work to recognize and avoid the most common problems encountered with establishing logistical support in a new region.

This paper is not aimed at providing tactical guidance on establishing a new logistical network. Rather, it is designed to outline operational choke points on the road map—problems, when identified and solved, that can lead to a more efficient and cost-effective flow of supplies and material, thereby removing or reducing the impact on the JFC, his staff and his components.

## **UNDERSTANDING THE PROBLEM**

To understand the challenges of establishing a supply network in a new geographic location, it is important to lay out a number of logistical assumptions.

- (1) Unnecessarily lengthy transit times can be a logistical network's greatest inefficiency.** Advancements in transportation technology have made the world a smaller place. Air shipments to anywhere can now be measured in hours. Surface shipments throughout the world can be measured in days—whether we speak about 5, 14, 30, or 90 days. Significantly longer transit times drive up costs: More goods are underway at any given time and not available for use. Uncertain transit

times at new locations lead supply officers to build up abnormally large emergency stocks. Required goods that could be sent via surface means through an efficient logistical network may need to be sent through a newly established network at a considerably higher cost by air, just to ensure timely receipt. Special handling and planning for these shipments also increases the workload on transportation managers including TRANSCOM and TPFDD.

**(2) Small operations in isolated locations are proportionally more difficult to support than larger ones.** Logic dictates there is a certain level of logistical planning that will be required to establish a network in a new geographic region, regardless of how much or how little is sent through the system. While an operation can expect to receive priority in the heat of battle, one can otherwise expect a small MOOTW's logistical network to run more slowly than a larger one's. The reason is cost consideration. A large operation's economy-of-scale can mobilize an entire cargo plane or railroad. In comparison, the cost of dedicating assets to a small operation may be unjustifiably high. Logistical supply lines for a small operation may thus be longer, as goods in the system await consolidation at the docks or sit at the airport and await transportation aboard a scheduled aircraft.

**(3) The learning curve associated with a new logistics network contributes to initial delays.** The best procedures in one geographic area are not necessarily the best in another. Logistics in a new region

creates innumerable first time difficulties that must be sorted out and overcome. Both U.S. and coalition partners are initially inexperienced with the new network. They must integrate the new supply lines into their extended logistical networks. This fusing process requires some innovation. Some standard operating procedures devised for logistics in NATO countries may simply not work in a newly developing region.

### **DEVELOPING THE SOLUTIONS**

The JFC and his staff must pay particular attention to these assumptions in ensuring that their operation's logistics successfully tap the military's worldwide support network. A MOOTW's limited scope means that valid logistical assumptions at the outset make the difference between success and failure. An inability to calculate initial logistical delays may mean that supplies are simply not on site when they are needed the most. In such situations there is the risk that the cost of emergency supply of a limited operation will then be so resource intensive that decision-makers would be willing to sacrifice goals, achieving either only limited success or measured failure.

To avoid the potential delays a logistical operation in a new geographic region may experience, a JFC staff must achieve success in five areas: (1) Establish a detailed transportation network for troops and supplies arriving from CONUS (2) Develop overall rules of the game. That is, create a bilateral or multilateral framework that will govern the international transit and end use of the logistical supplies. (3) Cement a solid working relationship with coalition partners and host

government officials to ensure expeditious transit and distribution of supplies. (4) Reach a clear understanding of military contractor responsibilities and carefully monitor compliance. (5) Be flexible in tailoring operation procedures to needs of the mission and vigorously exert international rights that will simplify mission execution.

Needless to say, these issues play a role in nearly every logistical operation. Their importance in this paper is that these factors can vary considerably when a logistical operation is established in a new geographic location.

### **ESTABLISHING A TRANSPORTATION NETWORK FROM CONUS**

Creating a transportation network to serve a new geographic location can be a daunting task. The major question when considering inter and intra-theater movement is which modes of transportation can be used based on topography. Are shipments by air, sea, rail and truck all possible? Next up are climactic factors. Do high snowfall, ice and poor road maintenance preclude overland shipment in the winter? Do the poorly developed port facilities mean that sea shipments will likely spend extended periods on the dock awaiting transshipment during the monsoon season? In high sea states can Joint Logistics over Shore (JLOTS) be used?

Cost factors also weigh into the equation. Transportation costs to an isolated location may initially be difficult to calculate, as current commerce into the region may be limited. In addition, cost calculations may play out considerably differently from similar scenarios in the more developed world.

For instance, surface transportation via truck may be quicker than rail service, if rail service is available, but its cost in a developing area may be exponentially higher. Trucking firms may charge a premium for using their equipment in a hostile or developing region where these assets are at risk. Similarly, in an area where trucks may transit a number of developing countries, the transportation firms may build in a financial buffer to cover costs of ensuring that foreign customs officials at intermediate points do not hold up the shipment. Conversely, rail service, while a natural convenience for sending goods point-to-point in containers, may be a disadvantage over trucking service if the rail lines compel a logistics line to run through a country that would be inappropriate for the operation. In some cases, rail executives might find themselves in a near monopoly position and set rail tariffs at a level that would make truck service a cost advantage. Rail lines may not be quite point-to-point and require some off-load and line-haul to a final destination.

A region's infrastructure is important in deciding modes of transportation. Runways may not be large enough to accommodate all models of aircraft. Poorly maintained off-load equipment, refueling capability, navigational beacons and primitive radar equipment may require airplane landings on instrumentation. A primitive port facility may mean that large ships cannot dock and be offloaded pier-side. It is possible there may be no cranes for offloading standard containers. Once on the docks, goods may not be able to be easily transported inland, as the port may not have an established rail link or developed roads.

A key for a JFC staff to establish a transportation link to a new region is to decide between organizing direct point-to-point shipping or to use an intermediate point for consolidation, which may create short-term storage problems. Efficiency encourages direct shipments. The least amount of manpower is consumed for loading and off loading. Transit time is normally kept to a minimum for a direct through shipment.

However, the high cost of shipping to a location off the beaten track makes it logical to investigate less direct means of organizing a logistics supply line. For instance, it may be more cost effective to ship supplies partway through established supply channels such as Transatlantic or Pacific. It could then be more efficient to ship the goods into the region via a separate shipment. This provides economies-of-scale advantages on usually traveled routes. For the final leg of the supply line, it also may provide an opportunity to turn to transportation contractors who may have a special expertise in the region, but who would not be competitive at organizing the shipment point-to-point. For these issues, the JFC can tap TRANSCOM's contracting and transportation expertise to establish the most efficient supply line to theater.

### **ESTABLISHING THE RULES OF THE GAME**

It is important for the JFC to coordinate with the Defense and State Departments to ensure that an operation's supplies underway are not delayed by allies or other foreign governments. Military supplies transported on long-established routes are protected from foreign customs duties and delays through NATO and other status of forces agreements. However, when establishing

logistical lines to new locations, these international legal agreements are often not in place.

In the arena of international law, it is important to remember that countries accede to and honor international agreements because it is in their interest to do so. For this reason, it is important that the negotiation of agreements allowing supply depots and importation of goods to support military operations lay out why it is in a foreign government's interest to support the operations and allow us to mold logistical lines that follow our procedures.

It should be noted that the degree of difficulty in negotiating such an agreement varies greatly according to the situation. In the heat of crisis, a foreign government may acquiesce to our importation requests simply to ensure U.S. support. Similarly, we may have no need to reach a formal agreement when dealing in a region with a disintegrating government or in the area of a combat zone. The greatest difficulty in reaching an agreement may be multilaterally or situations where there may be a peacetime need for establishing a supporting logistical base. In the former case, there is the inherent challenge of dealing with the often conflicting interests of a number of countries. In the later case, a country without an immediate security threat may be more interested in asserting its autonomy.

A JFC and unified CINC must make sure any agreement forged with foreign governments to expedite logistics is well coordinated among U.S. government agencies and is as all encompassing as possible. Optimally, resources should be expended to develop a bilateral or multilateral agreement that is enduring and

need not be renegotiated for each future operation in the region. An agreement should leave flexibility to expand operations or alter operating procedures. If the U.S. military has a need to expand operations into a new region, it is likely it will be doing so at the request of a foreign government in that area. When another government requests U.S. participation in a region, it is the most opportune time to formulate a set of terms that would allow for the least possible bureaucratic set of procedures. Long-established agreements such as those used in NATO can also provide negotiators with a starting point. Key is to keep any agreement as simple and flexible as possible, while guaranteeing U.S. rights.

#### **BUILD SOLID WORKING RELATIONSHIP WITH FOREIGN GOVERNMENT OFFICIALS AND COALITION PARTNERS**

Important in running a logistics line to a new region is soliciting the support of foreign officials and coalition partners. In developing countries that lack a long rule-of-law history, interests among foreign government officials may be particularly divergent.

The JFC and his staff must build a relationship with key foreign government contacts who are in a position to pick up the phone and solve problems that may arise when junior officials do not abide by bilateral agreements and understandings the U.S. has negotiated. The JFC also must coordinate with the CINC, POLAD and Ambassadors in the region to ensure through diplomatic means that these U.S. agreements maintain their effectiveness.

A foreign head-of-state may sign an agreement allowing the duty free importation and immediate access to goods imported for a military operation. Yet

the foreign government's officials at the operational and tactical levels may drag their heels in allowing implementation of the agreement.

Customs agents at borders may be reluctant to allow immediate, duty-free passage of goods. These officials may be hesitant to approve to be what they view as irregular transactions in a climate where standardized customs laws are constantly changing on a regular basis and they run the risk of losing their jobs in making mistakes. More often, customs officials in a developing country may earn a low wage and earn the bulk of their livelihood through pocketing a portion of the customs fees collected. These officials are often reluctant to approve fee free importations that they view as a loss to their own personal gain. In a developing country, there may also be among customs agents some envy about the benefits officials of other agencies within their government may receive. For this reason, there is no guarantee that a government-to-government transfer will run smoothly without significant effort. A foreign government's ministry may thus actually require U.S. assistance in clearing aid transfers through customs.

In dealing with foreign customs officials, it becomes apparent at the outset what level of effort may be required. If a military operation is conducted in a crisis situation, there may be little chance that officials will hold up shipments. Similarly, if the operation is of a significantly large scope, customs officials may be so overwhelmed with the volume of shipments that they may see the impracticality of holding up shipments. The greatest difficulties may be with small to moderately sized operations in the absence of an immediate and public threat.

In these situations, foreign customs officials may be willing to hold up shipments in pursuit of their own agendas.

In establishing a working relationship, it is important to understand the dynamics of their operations—what will drive the foreign customs officers to help us. Making them understand that special importation privileges have been granted from top levels of government is key. Building a sense of trust and cooperation is also important. It helps where feasible to follow special procedures a foreign customs may set forth, while vigorously working to change any procedures that may greatly add to a logistical operation's workload. For instance, a foreign customs may request an item-by-item list of goods to be imported duty free, whereas generic descriptions of shipments such as “office supplies” or “machine parts” would significantly reduce paperwork for both sides.

Working with coalition partners also has unique benefits and challenges. Coalition partners may be more experienced in conducting business in a region and may have positive input for establishing a new logistics supply line. At the same time, foreign partners may bring some interests and procedures to the table that differ from the U.S.'s. In these situations a cooperative compromise may be necessary. Equally important is recognizing that U.S. forces often use different equipment following different procedures. The right mix of supplies thus needs to be incorporated into the logistics supply line.

## **COORDINATING OPERATIONS WITH CONTRACTORS**

The military drawdown means the Defense Department turns increasingly to private contractors to provide support for overseas operations. The increased

flexibility gained through contractor use carries with it some special challenges for an operation that established supply support to a new region of the world.

Just as the military will experience a learning curve, a private contractor must also gain experience in the region. To guarantee success of the operation, the JFC staff must work closely with contractors to ensure that efforts are coordinated and everyone understands mission, tasks, goals and intent.

Shipping contracts should not be based solely on price, as may be the case in a more developed region, but also on quality performance. Since the contractor may be operating in the region for the first time as well, performance must be closely monitored and the contractor's assumptions vigorously examined.

Success of a mission is ultimately based on on-time performance. Assessing contractor penalties for not attaining its goals in a timely manner is not the quid pro quo tradeoff that can often be accepted in a more developed peace time environment. Supply delays can pose significant hardships in regions with poorly developed infrastructure.

It is important to recognize that contractor problems may be more likely to develop with smaller projects than with larger ones. With a mega contract, a transportation contractor has a great incentive to send a representative to a new region to develop a new supply line and solve its quirks on site. Similarly, at the smallest micro level a one-time shipment could be organized relatively easily through a commercial courier. For operations of a magnitude in-between, the difficulties are that a contractor may be working off a list of faulty assumptions but may not find the volume of the project a large enough incentive to send on-site

representatives. In these cases, contractors may simply turn to industry sources and subcontract the arrival delivery work to a foreign firm that for instance may simply be listed as a contact in the American Movers' Association guide.

Delayed performance by the sub-contractor may mean the contractor can be penalized, but that it no substitute for having the work completed in a timely manner.

Similarly, a firm's current performance levels may need to be closely examined. For instance, a current government contractor for domestic courier service may advertise service to a region where a new logistics line is being established. For domestic offices, the fact that the courier firm is used on a daily basis and advertise service to the region, may tend to funnel courier shipments through that firm. However, the courier service may not necessarily be able to offer the best service to the region, if it is encountering its own start-up problems in the area.

#### **EXERTING INTERNAL FLEXIBILITY WITHIN THE ORGANIZATION**

To successfully establish a supply line in a new geographic location, there must be a flexibility to tailor internal regulations to the success of the mission. An experienced JFC staff is essential to set effective standard operating procedures that will govern all supply shipments to the region. When required, use of consolidated receiving or intermediate consolidation points should be worked into the equation. An effective JFC staff will also review common practices in effect for worldwide supply shipments and determine which ones require modification for mission effectiveness.

In mapping out a new logistics network, U.S. embassies in the region can be a useful source of information. It is likely these Foreign Service posts have shipped goods into the region for years and have a detailed knowledge of the benefits and difficulties of supporting operations in the region.

In limited circumstances of compelling national interest and urgency, the Department of Defense should coordinate closely with the State Department in exercising diplomatic immunity for the transport of sensitive, key goods. For instance, goods of a government-to-government assistance nature may need to be transported urgently as part of a military bilateral agreement. Segments of the foreign government may have difficulties clearing the items through their own customs. Yet with a high interest of both governments in the project, it may be easiest to invoke diplomatic privilege by dispatching the goods as U.S. government property to the American embassy and then turn the shipment over as a gift once in country. Similarly, in the earliest days of establishing a new logistics network, it may be most safe and expeditious to transport some of the operation's most sensitive items under diplomatic seal through an embassy's defense attaché.

## **CONCLUSION**

The underlying framework for establishing a logistics network is the same regardless of where new supply lines are established. However, the operational dynamics are far more difficult when a logistical network is established in a part of the world where the American military has not had a traditional presence. A focus on solving potential juggernauts that transportation, policy, contractors,

foreign governments and internal regulations can create in servicing a new region will make an early contribution to a supply line's efficiency.

Logistics is a supporting function. Yet poorly planned and executed logistical support in a new geographical region runs the risk of drawing the JFC away from his primary objective of achieving operational success. Joint Publication 4-0 emphasizes that the relative combat power military forces can bring to bear against an enemy is constrained by a nation's capability to deliver forces and material which has historically been a major limiting factor in military operations. The key to logistical success in a region with no previous military presence is intense coordination. A talented JFC staff must pinpoint potential logistical delays in advance and take action to avoid them before they become a problem. The JFC, CINC and Ambassador must cooperate to ensure diplomatic negotiations establish effective understandings and agreements that support operations.

In a region with poor infrastructure and no previous U.S. military presence, a JFC must understand that logistics is an overriding factor. If resources are not successfully transported to theater, there are no local alternatives that would allow prolonged sustainment of an operation. Yet successful logistics in such situations provide U.S. forces an immediate advantage which the on-site adversary may not have. Understanding the problems of logistical support in an isolated region allows a JFC staff to develop prepare and avoid many. These operational solutions lighten the Joint Force Commander's logistics burden and allow him to focus on achieving the mission's objectives.

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